ELSEVIER

BioSystems 33 (1994) 239

Bio Systems

Author index

Volume 33 (1994)

Akoev, G.N. **33**, 25

Baran, I. **33**, 203
Bedrov, Y.A. **33**, 25
Bultmann, H. **33**, 75

Conrad, M. **33**, 155

Dick, O.E. **33**, 25

Eakin, T. **33**, 177

Ferreira, G.M.N. **33**, 31
Frigessi, A. **33**, 1

Garigliano, R. **33**, 221
Gilbert, D.A. **33**, 31
Gunji, Y.-P. **33**, 17

Hammond, K.D. **33**, 31
Haß, E.-C. **33**, 75

Ito, K. **33**, 17

Jeffries, J.W. **33**, 155
Johnsson, A. **33**, 193

Killich, T. **33**, 75
Kraus, M. **33**, 89

Lánský, P. **33**, 1

Mariotto, A.B. **33**, 1
Maximychev, A.V. **33**, 125
Meyer, T.E. **33**, 167
Müller-Herold, U. **33**, 215

Nettleton, D.J. **33**, 221
Nickel, G. **33**, 215

Pedersen, M. **33**, 193
Plath, P.J. **33**, 75
Poenie, M. **33**, 177

Rambidi, N.G. **33**, 45, 125
Rensing, L. **33**, 75
Rosenspire, A.J. **33**, 111

Sakamoto, N. **33**, 99
Sauro, H.M. **33**, 55
Sengstock, D.M. **33**, 111
Siemion, I.Z. **33**, 139
Siemion, P.J. **33**, 139

Usatov, A.V. **33**, 125

Vicker, M.G. **33**, 75

Weinand, R. **33**, 111
Wolf, B. **33**, 89

Xiang, W. **33**, 75

0303-2647/94/$07.00 © 1994 Elsevier Science Ireland Ltd. All rights reserved

ELSEVIER

BioSystems 33 (1994) 241–243

Bio Systems

Subject index

Volume 33 (1994)

Actin dynamics; Cell oscillations; Eukaryotic cell chemotaxis; Digital image processing; Karhunen–Loève analysis; Mathematical modelling **33**, 75

Aggregates; Crosslinking; Lateral diffusion **33**, 111

Amplitude and frequency curves; Hodgkin-Huxley system; Sodium and potassium conductances; Sensitivity to a parameter variation **33**, 25

Biochemical dynamics; Calcium; Phase transition; Oscillation; Parameter surface; Compartmental model; Calcium dynamics **33**, 177

Biomolecular computing; Brain models; Tradeoff principle; Non-linear dynamics; Fuzzy logic **33**, 45

Brain models; Biomolecular computing; Tradeoff principle; Non-linear dynamics; Fuzzy logic **33**, 45

Brain models; Reference neurons **33**, 155

Bulk energy; Microsphere; Thermal proteinoid; Stability; Surface energy; Electrostatic energy **33**, 215

Bursting; Neuronal model; Membrane potential; Stochastic process; Statistical inference **33**, 1

Calcium; Phase transition; Oscillation; Parameter surface; Compartmental model; Calcium dynamics; Biochemical dynamics **33**, 177

Calcium dynamics; Calcium; Phase transition; Oscillation; Parameter surface; Compartmental model; Biochemical dynamics **33**, 177

Calcium release; Cell cycle; $p34^{cdc2}$; Mitotic cyclin; MPF; $InsP_3$; Cyclin ubiquitination; Dynamical system **33**, 203

Cell cycle; $p34^{cdc2}$; Mitotic cyclin; MPF; $InsP_3$; Calcium release; Cyclin ubiquitination; Dynamical system **33**, 203

Cell oscillations; Actin dynamics; Eukaryotic cell chemotaxis; Digital image processing; Karhunen–Loève analysis; Mathematical modelling **33**, 75

Channelling; Metabolism; Metabolic control analysis; Moiety-conserved cycle; Metabolite seqestration **33**, 55

Chlorobium; Cytochrome b; *Rhodopseudomonas viridis*; *Rhodobacter sphaeroides*; *Heliobacterium*; *Synechoccus* **33**, 167

Circadian rhythms; Mathematical model; Phase singularity **33**, 193

Compartmental model; Calcium; Phase transition; Oscillation; Parameter surface; Calcium dynamics; Biochemical dynamics **33**, 177

Computational complexity; Molecular computing; Molecular neurocomputer; Molecular image processing devices **33**, 125

Computer simulation; Michaelis-Menten kinetics; Flux response; Transfer function of first-order system; Consecutive reactions; Product of transfer functions **33**, 99

Consecutive reactions; Michaelis-Menten kinetics; Flux response; Transfer function of first-order system; Product of transfer functions; Computer simulation **33**, 99

Crosslinking; Aggregates; Lateral diffusion **33**, 111

Cyclin ubiquitination; Cell cycle; $p34^{cdc2}$; Mitotic cyclin; MPF; $InsP_3$; Calcium release; Dynamical system **33**, 203

Cytochrome b; *Rhodopseudomonas viridis*; *Rhodobacter sphaeroides*; *Chlorobium*; *Heliobacterium*; *Synechoccus* **33**, 167

Digital image processing; Actin dynamics; Cell oscillations; Eukaryotic cell chemotaxis; Karhunen–Loève analysis; Mathematical modelling **33**, 75

0303-2647/94/$07.00 © 1994 Elsevier Science Ireland Ltd. All rights reserved

Dynamical system; Cell cycle; $p34^{cdc2}$; Mitotic cyclin; MPF; $InsP_3$; Calcium release; Cyclin ubiquitination **33**, 203

Edge of chaos; Self-organization; Evolution **33**, 17

Electrostatic energy; Microsphere; Thermal proteinoid; Stability; Surface energy; Bulk energy **33**, 215

Eukaryotic cell chemotaxis; Actin dynamics; Cell oscillations; Digital image processing; Karhunen–Loève analysis; Mathematical modelling **33**, 75

Evolution; Self-organization; Edge of chaos **33**, 17

Evolutionary algorithms; Shape representation; Iterated function systems **33**, 221

Extracellular matrix; Ising model; Signal transduction; Receptor tyrosine kinases; Monte Carlo simulation; Growth factors; Tumor associated antigens (CEA) **33**, 89

Flux response; Michaelis-Menten kinetics; Transfer function of first-order system; Consecutive reactions; Product of transfer functions; Computer simulation **33**, 99

Fuzzy logic; Brain models; Biomolecular computing; Tradeoff principle; Non-linear dynamics **33**, 45

Genetic code; Regularities of synonymous codon choice; Third base and amino acid conformational preference **33**, 139

Growth factors; Ising model; Signal transduction; Receptor tyrosine kinases; Monte Carlo simulation; Extracellular matrix; Tumor associated antigens (CEA) **33**, 89

Heliobacterium; Cytochrome b; *Rhodopseudomonas viridis*; *Rhodobacter sphaeroides*; *Chlorobium*; *Synechoccus* **33**, 167

Hodgkin-Huxley system, Sodium and potassium conductances; Amplitude and frequency curves; Sensitivity to a parameter variation **33**, 25

$InsP_3$; Cell cycle; $p34^{cdc2}$; Mitotic cyclin; MPF; Calcium release; Cyclin ubiquitination; Dynamical system **33**, 203

Insulin; Phosphorylation dynamics; Oscillations **33**, 31

Ising model; Signal transduction; Receptor tyrosine kinases; Monte Carlo simulation; Extracellular matrix; growth factors; Tumor associated antigens (CEA) **33**, 89

Iterated function systems; Evolutionary algorithms; Shape representation **33**, 221

Karhunen–Loève analysis; Actin dynamics; Cell oscillations; Eukaryotic cell chemotaxis; Digital image processing; Mathematical modelling **33**, 75

Lateral diffusion; Crosslinking; Aggregates **33**, 111

Mathematical model; Circadian rhythms; Phase singularity **33**, 193

Mathematical modelling; Actin dynamics; Cell oscillations; Eukaryotic cell chemotaxis; Digital image processing; Karhunen–Loève analysis **33**, 75

Membrane potential; Neuronal model; Bursting; Stochastic process; Statistical inference **33**, 1

Metabolic control analysis; Metabolism; Moiety-conserved cycle; Metabolite seqestration; Channelling **33**, 55

Metabolism; Metabolic control analysis; Moiety-conserved cycle; Metabolite seqestration; Channelling **33**, 55

Metabolite seqestration; Metabolism; Metabolic control analysis; Moiety-conserved cycle; Channelling **33**, 55

Michaelis-Menten kinetics; Flux response; Transfer function of first-order system; Consecutive reactions; Product of transfer functions; Computer simulation **33**, 99

Microsphere; Thermal proteinoid; Stability; Surface energy; Bulk energy; Electrostatic energy **33**, 215

Mitotic cyclin; Cell cycle; $p34^{cdc2}$; MPF; $InsP_3$; Calcium release; Cyclin ubiquitination; Dynamical system **33**, 203

Moiety-conserved cycle; Metabolism; Metabolic control analysis; Metabolite seqestration; Channelling **33**, 55

Molecular computing; Molecular neurocomputer; Molecular image processing devices; Computational complexity **33**, 125

Molecular image processing devices; Molecular computing; Molecular neurocomputer; Computational complexity **33**, 125

Molecular neurocomputer; Molecular computing; Molecular image processing devices; Computational complexity **33**, 125

Monte Carlo simulation; Ising model; Signal transduction; Receptor tyrosine kinases; Extracellular matrix; Growth factors; Tumor associated antigens (CEA) **33**, 89

MPF; Cell cycle; $p34^{cdc2}$; Mitotic cyclin; $InsP_3$; Calcium release; Cyclin ubiquitination; Dynamical system **33**, 203

Neuronal model; Membrane potential; Bursting; Stochastic process; Statistical inference **33**, 1

Non-linear dynamics; Brain models; Biomolecular computing; Tradeoff principle; Fuzzy logic **33**, 45

Oscillation; Calcium; Phase transition; Parameter surface; Compartmental model; Calcium dynamics; Biochemical dynamics **33**, 177

Oscillations; Phosphorylation dynamics; Insulin **33**, 31

p34^{cdc2}; Cell cycle; Mitotic cyclin; MPF; $InsP_3$; Calcium release; Cyclin ubiquitination; Dynamical system **33**, 203

Parameter surface; Calcium; Phase transition; Oscillation; Compartmental model; Calcium dynamics; Biochemical dynamics **33**, 177

Phase singularity; Circadian rhythms; Mathematical model **33**, 193

Phase transition; Calcium; Oscillation; Parameter surface; Compartmental model; Calcium dynamics; Biochemical dynamics **33**, 177

Phosphorylation dynamics; Insulin; Oscillations **33**, 31

Product of transfer functions; Michaelis-Menten kinetics; Flux response; Transfer function of first-order system; Consecutive reactions; Computer simulation **33**, 99

Receptor tyrosine kinases; Ising model; Signal transduction; Monte Carlo simulation; Extracellular matrix; growth factors; Tumor associated antigens (CEA) **33**, 89

Reference neurons; Brain models **33**, 155

Regularities of synonymous codon choice; Genetic code; Third base and amino acid conformational preference **33**, 139

Rhodobacter sphaeroides; Cytochrome b; *Rhodopseudomonas viridis*; *Chlorobium*; *Heliobacterium*; *Synechoccus* **33**, 167

Rhodopseudomonas viridis; Cytochrome b; *Rhodobacter sphaeroides*; *Chlorobium*; *Heliobacterium*; *Synechoccus* **33**, 167

Self-organization; Edge of chaos; Evolution **33**, 17

Sensitivity to a parameter variation; Hodgkin-Huxley system; Sodium and potassium conductances; Amplitude and frequency curves **33**, 25

Shape representation; Evolutionary algorithms; Iterated function systems **33**, 221

Signal transduction; Ising model; Receptor tyrosine kinases; Monte Carlo simulation; Extracellular matrix; growth factors; Tumor associated antigens (CEA) **33**, 89

Sodium and potassium conductances; Hodgkin-Huxley system; Amplitude and frequency curves; Sensitivity to a parameter variation **33**, 25

Stability; Microsphere; Thermal proteinoid; Surface energy; Bulk energy; Electrostatic energy **33**, 215

Statistical inference; Neuronal model; Membrane potential; Bursting; Stochastic process **33**, 1

Stochastic process; Neuronal model; Membrane potential; Bursting; Statistical inference **33**, 1

Surface energy; Microsphere; Thermal proteinoid; Stability; Bulk energy; Electrostatic energy **33**, 215

Synechoccus; Cytochrome b; *Rhodopseudomonas viridis*; *Rhodobacter sphaeroides*; *Chlorobium*; *Heliobacterium* **33**, 167

Thermal proteinoid; Microsphere; Stability; Surface energy; Bulk energy; Electrostatic energy **33**, 215

Third base and amino acid conformational preference; Genetic code; Regularities of synonymous codon choice **33**, 139

Tradeoff principle; Brain models; Biomolecular computing; Non-linear dynamics; Fuzzy logic **33**, 45

Transfer function of first-order system; Michaelis-Menten kinetics; Flux response; Consecutive reactions; Product of transfer functions; Computer simulation **33**, 99

Tumor associated antigens (CEA); Ising model; Signal transduction; Receptor tyrosine kinases; Monte Carlo simulation; Extracellular matrix; Growth factors **33**, 89